

### REMARKS/ARGUMENTS

Claims 1-6 stand rejected in the outstanding Official Action. Claim 1 has been amended and therefore claims 1-6 remain in this application.

The Examiner's withdrawal of the previous rejection under 35 USC §102 with respect to the Buhrer reference is very much appreciated. Additionally, the Examiner's confirmation that Buhrer elements 46 and 47 are passive liquid crystal elements and not "electro-optical switches" is very much appreciated, especially in view of the fact that Applicants' claims require first and second electro-optical switches.

In the paragraph bridging pages 2 and 3 of the Official Action, claims 1-6 stand rejected under 35 USC §102 as being anticipated by Caracci (U.S. Patent 6,563,973). The Court of Appeals for the Federal Circuit has noted in the case of *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 USPQ 481, 485 (Fed. Cir. 1984) that "[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (emphasis added).

Applicants' originally submitted independent claims 1 and 6 provided either structures or method steps or interrelationships between structures and method steps which are not only not disclosed in Caracci, but are taught away from by the Caracci patent.

For example, independent claim 1 specifies a "polarisation splitter device" which is "positioned between said waveguides" (emphasis added). While the Examiner correctly identifies item 125a in Caracci as a polarisation splitter device, the Examiner mistakenly alleges that this is "positioned between said waveguides." In fact, item 125a, as clearly shown in Figure 21, is positioned within one or the other waveguides 1 and 2 and never "between said

waveguides” as required in Applicants’ claim. Therefore, Caracci fails to disclose the “between” interrelationship between the claimed “polarisation splitter” and the claimed first and second “optical waveguides.”

Additionally, the Caracci reference clearly leads one of ordinary skill in the art away from Applicants’ claimed interrelationship of elements, i.e., the location of a polarisation splitter device “between said waveguides.” Accordingly, and in view of the above, Caracci not only fails to anticipate Applicants’ claim 1 invention (and that of claims 2-5), but would actually lead one of ordinary skill in the art away from Applicants’ claimed interrelationship of elements.

It is also noted that Applicants have made minor corrections in the language of claim 1 to indicate that the arrangement of the first and second waveguides are such that, in the absence of activated first and second optical switches, it transmits the refracted and reflected components from the first light input to the first outlet port and from the second light input to the second outlet port. The first and second electro-optical switch clauses have also been modified to indicate that when the switches are “activated,” they switch the combined components towards the second and first outlet ports, respectively. Of course, these features are not shown or disclosed in the Caracci reference as well.

An example with respect to claim 6, the Examiner alleges that Caracci teaches the claimed step of “selecting the operation of said first and second electro-optical switches” (emphasis added). Actually, Caracci’s switches 155a do not have multiple operations from which an operation may be selected. Each switch 155a directs the light received from one of the inputs into one of the outlets and the outlet is predetermined by the positions of switches 135a and 145a. Therefore, switch 155a is only capable of directing light into one particular fixed

outlet. This cannot be altered, as no matter what voltage is applied to switch 155a, it will never change the outlet port that it is designed to direct light towards. Thus, no matter what is done, Caracci cannot select operation of first and second electro-optical switches so as to couple the first and second inputs into one outlet, whether it is the first outlet or the second outlet.

As a result, Caracci cannot anticipate the subject matter of Applicants' independent claim 6. Moreover, Caracci teaches away from the subject matter of claim 6 in that it can only direct light received from one input into one outlet and therefore cannot couple "first and second inputs into an outlet" as required by claim 6. Accordingly, Caracci would lead one of ordinary skill in the art away from Applicants' claimed combination of elements. As a result, claim 6 cannot be anticipated nor rendered obvious by the subject matter disclosed in the Caracci patent.

In view of the above, any further rejection of independent claims 1 and 6 or claims 2-5 dependent on claim 1 as being either anticipated or obvious in view of the Caracci reference is respectfully traversed.

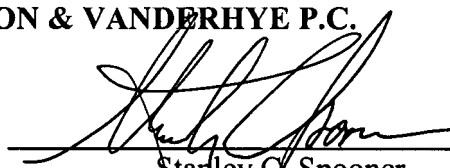
Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that claims 1-6 are in condition for allowance and notice to that effect is respectfully requested. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, he is respectfully requested to contact Applicants' undersigned representative.

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Appl. No. 10/518,898  
October 11, 2007

Respectfully submitted,

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